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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/528,180

Filing Date: October 06, 2005

Appellant(s): BARKOWSKI ET AL.

\_\_\_\_\_  
Gerard A. Messina  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed November 3<sup>rd</sup>, 2009 appealing from the Office action mailed March 30<sup>th</sup>, 2009.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

**(8) Evidence Relied Upon**

2002/0049534	Yuda et al	04-2002
2002/0198632	Breed et al	12-2002
6223125	Hall	04-2001

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claim 11 – 16, 19 -21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yuda et al,2002/0049534 in view of Breed et al, 2002/0198632.**

As for claim 11, Yuda et al discloses a navigational device for guiding a vehicle within a network of traffic routes, comprising: A processing unit for calculating a travel route to a destination ( Para 22, 60); a display for displaying a guide object, a movement of the guide object along the calculated travel route being displayed in relation to a traffic route, whereby the movement of the guide object represents driving maneuvers to be performed by a driver of the vehicle to reach the destination ( Para 61 and 79). Yuda et al is silent regarding a determining arrangement to determine a traffic situation in front of the vehicle by sensing other vehicles in an area surrounding the guided vehicle; an adaptively controlling arrangement to adaptively control the movement of the guide object depending on the traffic situation.

Breed et al shows a determining arrangement to determine a traffic situation in front of the vehicle by sensing other vehicles in an area surrounding the guided vehicle ( Para 22, 23,26.30,46,49 ); an adaptively controlling arrangement to adaptively control the movement of the vehicle depending on the traffic situation ( Para 46,49 ).

Further, it is inherent that the movement of the guide object movement is adaptively controlled since the navigational information for guide object movement is depending on continuously changing feedback traffic situation information accordingly, as ALVINN, Real Time adaptive neural network, Vision-Based Neural Network, Intelligence Vehicle Highway Systems, Dynamic System in US 5479173; 5613039;5504482 mentioned in Breed et al.

It would have been obvious for one of ordinary skill in the art to provide the traffic sensing and arrangement means of Breed et al, to Yuda et al, in order to provide external sensing means, as taught by Breed et al, as external source along with traffic jam data that taught by Yuda et al.

As for claim 12 – 15; Yuda et al shows the guide object includes a vehicle image (paragraph 79) and the guide object is displayed at a selected distance in front of a current position of the vehicle on the travel route in relation to the traffic route (paragraph 61); the display is configured to superimpose the guide object on the traffic route, within a field of view of a driver of the vehicle (paragraph 61 and 79)

As for claim 19, 20, Yuda et al shows the guide object includes a display area for displaying at least one of directional displays and warning displays associated with a driving maneuver to be performed (Fig. 8); an arrangement for acoustically outputting driving instructions associated with the guide object (paragraph 60).

As for claim 21, Yuda et al shows an arrangement for representing on the display an area surrounding the traffic route (Para 22, 60, 61 and 79 ); the guide object includes a vehicle image ( Para 79 ), the guide object is displayed at a selected distance in front of a current position of the vehicle on the travel route in relation to the traffic route ( Para 61 ), the display is configured to superimpose the guide object on the traffic route, within a field of view of a driver of the vehicle ( Para 61, 79 ).

**Claim 17, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yuda et al, 2002/0049534 in view of Breed et al, 2002/0198632 and Hall, 6,223,125.**

As for claim 17, 18, 22 - 24, Yuda et al shows an arrangement for representing on the display an area surrounding the traffic route ( Fig 8 ); an arrangement for acoustically outputting driving instructions associated with the guide object ( Para 60 ); the guide object includes a vehicle image ( Para 79 ); the guide object is displayed at a selected distance in front of a current position of the vehicle on the travel route in relation to the traffic route ( Para 61,79 ); the display is configured to superimpose the guide object on the traffic route, within a field of view of a driver of the vehicle, and the guide object includes a display area for displaying at least one of directional displays and warning displays associated with a driving maneuver to be performed ( Fig 9, Para 61 and 79 ); a processing unit for calculating a travel route to a destination ( Para 22, 60 ); display for displaying a guide object ( Fig 8 ), a movement of the guide object along the calculated travel route being displayed in relation to a traffic route ( Para 22, 23,26.30,46,49, 61,79 ), the movement of the guide object represents driving maneuvers to be performed by a driver of the vehicle to reach the destination ( Para 22, 23,26.30,46,49, 61,79 ); Yuda et al is silent regarding to specifically disclose the arrangement for determining the traffic situation sense other vehicles in an area surrounding the guided vehicle to determine the traffic situation and an arrangement for ascertaining a highest permissible speed, the ascertained highest permissible speed is used for determining the traffic situation; Hall, however, discloses being able to monitor situations around the vehicle in order to determine the traffic situation and to avoid collisions. (Abstract). Although Hall is mostly geared toward determining collision situations, it would have been obvious to one having ordinary skill in the art at the time of the invention to include the monitoring around the vehicle for other vehicles and vehicle speeds in order to determine the traffic around the vehicle and further determine if steps needed to be taken

to change the route; Further, it is inherent that the velocity of guided object to be influenced by the highest permissible speed since highest permissible speed is obtained adaptively from the surrounding environment and adaptively corresponding to the current speed of vehicle corresponding with velocity of the guided object.

#### **(10) Response to Argument**

In response to appellant's argument that the rejection under 35 U.S.C. 103(a) of claims 11 - 16, 19, 20 and 21 has not established prima facie case of obviousness. Appellant's attention is directed the Basic Requirements of a Prima Facie of Obviousness where states the prior art must suggest the desirability of the claimed invention.

Firstly, Appellant's attention is further directed to the proper classification search guideline for the prior art reference where the proper search guideline is in correspondence with respect to the suggestion of the desirability of the claimed invention; where the primary reference Yuda et al ( US Pat Pub 2002/0049534 ) classified in Class 701/209, directed to routing search or determining device, as the same with appellant's application, Barkowski et al ( US Pat Pub 2006/0100774), also classified in Class 701/209; where the secondary reference, Breed et al ( US Pat Pub 2002/0198632 ) classified in the Class 701/213, directed to global positioning system, belong to the parent class 700/200, as also the same classification with appellant's application, classified in 700/200, directed to navigation system, where the prior art reference has been carefully searched for its content and classification;

Secondly, appellant's attention is further directed to the requirement of reasonable expectation of success is required; obviousness requires only a reasonable expectation of

success. Appellant's attention is further directed to Yuda et al and Breed et al, where Yuda et al provides a known device and method, navigational device along with the method of operating it; Breed et al provides known apparatus for the operating method of Yuda et al, a determination and controlling method for the navigational device to Yuda et al, where it is obvious for one of ordinary skill in the art to provide a known technique/method, that provided by Breed et al, to a known device/method of Yuda et al ready for improvement and modification to yield predictable results;

Lastly, where the third requirement states that all the claim limitation need to be addressed. Appellant's attention is further direct to claim rejection stated above where all the claim limitation has been addressed. Thus, the requirement for prima facie case of obviousness has been met.

In response to appellant's remark that Yuda reference does not disclose or suggest the claim limitation of claim 11, "guide object along the calculated travel route being displayed in relation to traffic route, whereby the movement of the guide object represents driving maneuvers to be performed", Appellant's attention is directed to Yuda, Paragraph 0061, where states, "The route navigation symbol drawing section 5 comprises a route navigation symbol data generating section 23 and a route navigation symbol image generating section 24 and generates a route navigation symbol image from the forward map data". As also shown by Figure 2, Paragraph 0070; In this instant case, the navigation symbol is the guide object, which is the guidance of movement along the calculated travel route, where the navigational symbol represents the



driving maneuvers to be performed by driver; where the calculated travel route is to be calculated by optimum route searching section 3, as shown on Paragraph 0065, Yuda et al.

Further, appellant states that the specification of the appellant's application discloses that the driver merely needs to follow along and emulate the appropriate driving maneuvers; Thus, the need for converting symbolic optical display or acoustic instructions into an active driving maneuver, is eliminated". However, it is inherently that the primary purpose for navigational system, both Yuda et al and appellant's application, is designed for the driver that merely needs to follow along and emulate the appropriate driving maneuvers; without the driver following and emulate the driving maneuvers, the underlying fundamental purpose served by a navigational system would not exist.

Further, it is noted that the features upon which applicant relies (i.e. driver merely needs to follow along and emulate the appropriate driving maneuvers; Thus, the need for converting symbolic optical display or acoustic instructions into an active driving maneuver, is eliminate,) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims.

In response to appellant's remark that neither Yuda et al does not describe or suggest the feature of adaptively controlling the movement of the guide object depending on the traffic situation. Appellant's attention is directed to Breed et al, Paragraph 0046, where states, "The neural network is trained based on... given the output from a video camera. The output of neural network is the direction that the vehicle should head based on the input information from the video camera". In this instant case, the traffic situation is obtained as the input information of

the video camera as utilized on the land vehicle, where the neural network provides adaptively controlled movement as to be utilized by Yuda et al.

Further, in response to appellant's remark that Yuda et al in view of Breed et al has not met Basic Requirements of a Prima Facie of Obviousness, appellant's attention is directed to the response above as whether the Basic Requirements of a Prima Facie of Obviousness has not met has been addressed. Further, in response to appellant's remark that Yuda et al in view of Breed et al teaches away from the appellant's application since Breed et al provides the functionality of inter vehicle communication where Yuda et al does not show the intervehicle communication; it is noted that, "the prior art's mere disclosure of more than one alternative does not constitute a teaching away from any of these alternatives because such disclosure does not criticize, discredit, or otherwise discourage the solution claimed.." In re Fulton, 391 F.3d 1195, 1201, 73 USPQ2d 1141, 1146 (Fed. Cir. 2004). In this instant case, whether Yuda et al in view of Breed et al has created inter-vehicle communication has not barred or destructed the functionality of appellant's application, where the construction of inter-vehicle communication is merely an alternative/additional function provided by Breed et al and has not interfered appellant's application; In addition, appellant has not even stated or mentioned whether appellant's application is capable of inter-vehicle communication or not and thus has not created a premise for teaches away.

In response to appellant's remark that Yuda et al does not show the recited claim limitation, " the guide object is displayed at a selected distance in front of a current position of the vehicle on the travel route in relation to the traffic route". Appellant's attention is directed to

Yuda et al, Paragraph 0061, where states, "The route navigation symbol drawing section 5...and generates a route navigating symbol image from the forward map data"; appellant's attention is further directed to paragraph 0067, where states, "the acquiring of the forward map data in the forward map data acquiring section 4 will be explained. The forward map data acquiring section 4 is responsive to the current position data from the current position data acquiring section 2 for demanding a map data for N meters ahead from the current position". In this instant case, the route navigation symbol (guide object), which is from the forward map data, is N meters ahead of current position, in front of a current position of the vehicle.

In response to appellant's remark that Yuda et al does not show a display area for displaying at least one of direction displays and warning displays associated with a driving maneuver to be performed. Appellant's attention is directed to Yuda et al, Paragraph 0061, where the route navigation symbol is the direction display to be displayed on plane image display section 8 shown on Figure 2, Paragraph 0068; further, appellant's attention is directed to Paragraph 0073, where traffic sign identification display information is the warning display for displaying "brake lamp flashing" in response to a traffic sign data" school zone = slow down" along with Paragraph 0081, where traffic sign identification display information as warning display is used as displaying left blinker flashing in response to traffic data, "highway exit = lane shift and slow down" as associated with a driving maneuver to be performed.

In response to appellant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on

obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. It is instant case, the judgment of obviousness for Yuda et al in view of Breed et al has been provided as above.

It is hereby clarified by one of ordinary skill in the art that the subheading with respect to claims 16 and 17 were intended to be deleted but were missed. It is the subheading that is for Claim 11 – 15, 19 -20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yuda et al, 2002/0049534 in view of Breed et al, 2002/0198632 along with secondary subheading, Claim 18, 22 - 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yuda et al, 2002/0049534 in view of Breed et al, 2002/0198632 and Hall, 6,223,125 were intended to be placed but were missed.

#### **(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Conferees:

/KHOI TRAN/  
Supervisory Patent Examiner, Art Unit 3664  
/Ian Jen/  
Examiner, Art Unit 3664  
/Marc Jimenez/  
TQAS TC 3600

